A. N. CARTER

SAMPLE REGISTER

NEW SAMPLE NO	BOX STORAGE REF	LOCALITY	DATE WASHED
		MAY-JUNE 1972	
	31 WEDNESDAY	WEEK 22 . 152-214	
1	21	Kiladia Nungwrrner Southerly outcrop shown on Parish Plan. Gritty shell bed Coll ANC 26-3-1957	4-7-74
2	21	Hillside, Mitchell R. Loc. F.76 of Easton "Immediately above highest hard lst. bed and 3ft. above what is apparently the top of the Bairnsdale Lst. Coll ANC 24-3-1957	4-7-74
3	21	Hillside. Mitchell R. Lowest exposure on private roadway 300 yds NE of Hillside School. Coll ANC. 24-3-1957	
4		973364 Hartland 76/38. Road ascent E. of Toorloo Arm, Lake Tyers. PHB sample, 5ft. below road level, at the top of the 52 ft. covered interval of Wilkins (1963. p.45)	8-11-76
5		76/51. Red Bluff. Bed of ferruginous clayey sand about 5 ft. above beach level. Contains forams. and drachnoides.	9-11-76
6		76/34. Ref. 985344 Hartland. Bottom of PHB hole sited in the centre of 3 clumps of swordgrass arranged in a triangle, about 4ft above water level. Sample is from bottom of hole, about 5ft. into the bank, but the hole was very gently inclined. This locality was sampled previously, further up the bank but the sample was barren. There is a lot of fine silt in this sample. Very little glauconite.	15-11-76
	1 THURSDAY	Corpus Christi WEEK 22 . 153-213	
7		76/43 Ref. 014346 Hartland PHB. Farthest sample up Blackfellows Arm. Dark brown ferruginous clay. Its washing behaviour is that of a predominantly clayey rock. There is quite a lot of glauconite & some coarse q/z. sand.	16-11-76
8		76/42 Ref. 014345 Hartland. Blackfellows Arm Dark brown ferruginous clay. When washed it seemed more richly glauconitic & has less coarse sand than 014346	
9.		76/41. 013344 Hartland. Brown & grey mottled clay. This sample washed more easily & quickly than the other samples from the TRF in Blackfellows Arm	22-11-76

10 76/40. 015341 Hartland. "Stiff clay lithology" 23.11.76
Fawn & pale grey mottled clay. It is mostly clay, but is of quite a different general character than the 3 foregoing samples which have all the TRF characteristics of lithology. This sample contains some glauconite and some large lst. nodules but much clean quartz silt such as one doesn't find in the TRF lithology.

11 76/39 015317 Hartland. "Stiff clay lithology". 24.11.76
Predominantly pale grey but also fawn mottled clay. Some white lst. nodules, a good deal of clean (i.e. non-ferruginous) quartz silt. The grid ref. of this sample is wrong + to give it a new identity it was re-numbered NS.76

12 76/38. 015330 Hartland. Blackfellows Arm. Light brown (darker than "fawn") and mid-grey clay. Contains the usual Kalimnan silt fraction & lst. nodules.

13 060362 Hartland. From memory, a grey-greenish grey clay. An old sample of NOV. 1974 but some of its residues were processed in NOV. 1976. It is a slightly calcareous glauconitic clay, unlike the ferrug. glauc. clays elsewhere in the TRF.

14 853582 Carrajung "Lower hole, Bag 4"
i.e. the lowest sample in the hole. Creamy-grey friable argillaceous limestone.

15 059342. Hartland. Trident Arm. Nodule bed locality. PHB hole, 2 ft. below nodule bed. Glauconitic, ferruginous clay - it took a lot of boiling to remove all the clay. 2:12:76

16 059342 Hartland. Trident Arm. Sample of the nodule bed itself. Slightly weathered ferruginous clay, light brown with white patches. Contains, Glauconite, coarse sand, Placunanomia 7:12:76

17. 986337 Hartland. This is a 1974 sample which was washed but never concentrated in 1974. It was in the hut in its original washing basins. It was processed as recorded in notes. Its position suggests that it ought to be in the TRF, but it contains no glauconite. I will report on its fauna later.

5 MONDAY — Foundation Day (W.A.) — WEEK 23 . 157-209

18 — 059341 Hartland. Trident Arm. South of nodule bed outcrop. "30ft. above water level and 1ft. below overburden". Collected by Geoff Tassell & this is his description of the site. Hard lumps in the sample contain many Turritella When washed, the sample consists mainly of calc. sand. — 14·12·76

19. — 059341 Hartland. Trident arm, a hundred yds or so S. of the nodule bed outcrop, 25ft. above W.L. Below sample NS.18. Clayey silt. Coll by G.W. Tassell Bag contains a large lump of lst, which didn't break down on washing. Turritella & Placunanomia are present.

20 — 049343 Hartland. Nowa Nowa Arm. Fawn & grey friable clay. PHB. into very low outcrop on W bank of NNArm. Placunanomia is very common and there are a few nodules like those of the phosphatic type in the washings, plus a fair amount of coarse quartz sand and glauconite.

6 TUESDAY — WEEK 23 . 158-208

21 — 983355 Hartland. Toorloo arm. Mottled clay, yellowish brown and grey. On washing, much bryozoal debris; no glauconite. Rosehill Mbr. of T.R.F.

22 — Beaumaris "Level 3, A.N.C. 30:11:77" Reddish brown clay and coarser sediment from upper part of the nodule bed, but not extending down as far as the nodule horizon. — 16·12·77.

23 — Beaumaris, "Level 5, A.N.C. 30·11·77" Reddish brown sandy clay. 20cm thick bed with Neotrigonia acuticostata, whose base is 40cm. above the unconformity. Contains Globoquadrina dehiscens. — 19·12·77

24 — Beaumaris Level 6 of 30·11·77. "Bed with decomposed shells. Collected from about 80m. south of Keefers boatshed. Contains: Orbulina universa, O. suturalis, Globigerinoides glomerosa. — 20:12:77.

Level 6 bed with decomposed shells.
↑ about 6 ft.

BEAUMARIS " 5 20 cm clay
30·11·77. 10 cm limestone JUNE 1972
" 4 10 cm clay.
5-10 cm hard lst.

WEEK 23 . 159-207 WEDNESDAY 7
Level 3 → (2) 15 cm. Nod. bed UNCONF
DATE WASHED
Level 1. [ ] 5-30 cm below — see Sample NS. 175

25 Solitude Bay. 057352 Hartland. Fine grained brown silty clay. On washing it turns out to contain limestone nodules and glauconite, but the glauconite is scarcer and more fine-grained than in the "genuine T.R.F." This sample is in what I propose calling the Long Point Formation. 26·1·78

26 Hunter's Point, North Arm. Ref. 910278 Bairnsdale 1:63,360. PHB, 2 m below water level. Fawn silty clay and a few small limestone nodules. Clay, about 60%; silt + fine sand about 40%. Not many forams and no glauconite 23·5·79

27 North Arm, Ref. 903291 Bairnsdale 1:63,360. At this locality Trident Arm Formation occurs at water level. Sample is from basal Jemmy Point Formation, about 1 m. above water level. Fawn & light grey clay. The sample turned out to be about 80% clay 24·5·79

WEEK 23 . 160-206 THURSDAY 8

28 Hunters Point, North Arm. Ref. 910278 Bairnsdale Sample from 1 m above WL, from the same hole that the big Brechites came from. Contains quite a striking proportion of silt that passed through the 180 μ sieve. 25·5·79.

29 Tram cutting Mississippi Bk. 878322 Sample which James & I collected in a drum on 17·5·79. The PNB appears more as a layer of phosphatized burrows than as rolled nodules as at Trident Arm. This sample was collected from immediately above the nodule horizon. On washing, it is mainly clay, a fair bit of silt, not much fine sand & quite micaceous. The washings contain a few calc. nodules, a good deal of fine sand but not much shell debris. There doesn't seem to be any glauconite. If there is any it is very fine grained. 28·5·79

JNE. Th F Sa Su M Tu W Th F Sa Su M Tu W Th F Sa Su M Tu W Th F Sa Su M Tu W Th F
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

9 FRIDAY — WEEK 23 . 161-205

30 — Maringa Ck. road cutting, west side. Bed g of section of 13·5·79. Shelly bed within Nyerimalang Formation. Yellowish-brown & grey silty clay; more clayey than is usual in N.F. Distinctly micaceous. Quite shelly & with limonitic flakes and fragments of laminated fine sandstone. It is more micaceous than JPF. — 30·5·79.

31 — Ref. 872272 Maringa Ck. track. Most southerly cliff before descent to shore. Soft material from between flaggy limestones of Nyerimalang Fm. When washed it shows a lot of lime-cemented aggregates of fine quartz sand. For the quantity washed, it gave a rich floating of forams, mainly Nonion victoriense & A. beccarii, plus a few Flintina intermedia — 6·6·79

32 — 056385 Nowa Nowa Arm. Soft bed of argillaceous lst at base of cliff. Sediment consists mainly of bryoz. debris but is much more clayey than beds above & below. — 8·6·79

10 SATURDAY WEEK 23 . 162-204 — WEEK 24 . 163-203 SUNDAY 11 — 2nd After Trinity, St. Barnabas' Day

33 — "Tram Cutting", Mississippi Ck. 878322. P.H.B. sample from 45cm. below floor of cutting. Mousey-brown coloured silty clay. On washing, it revealed quite a large sand-coated nodule, presumably phosphatic. Contains a small amount of mica. — 14·6·79.

34 — Solitude Bay, Lake Tyers, 056351 Hartland. Light brown slightly silty clay with a few calcareous nodules. — 25·6·79

35. — "Tram Cutting" Mississippi Ck. 878322. PHB sample into wall of cutting, about 1m above floor. Contains calcareous nodules totally different in character from phosphatic nodules about 1m below. Light brown silty clay. — 25·6·79 ½ bag not washed; washed 8·10·79

36 — 904287, North Arm. Fawn & light grey silty clay. Coll. from just above nodule bed. = 860085 BAIRNSDALE 1:100,000. "Spondylus Locality" of Parish Plan (Easton, Thomas & Chambers, 1929) — 26·6·79

WEEK 24 : 164-202 MONDAY 12

Queen's Birthday Holiday (Except W.A.)

Man-made cliff on Maringa Ck Track. "5 cm. grey silty clay between coquinas. Bed r". Coll. 14·5·79. (i.e. Between USB1 + USB2. stiff

37 . Light - mid grey clay, as distinct from the brown silty clay matrix of the coquinas above & below. The residue is nearly all mica.

Ref. 859051 Bairnsdale 1:100,000

38 905293. North Arm, at the "east end" of the outcrop. Brown + grey glauconitic clay. 3·7·79
Yielded a lot of washed sample. Contains Spondylus, Mytadora Venericardid. 2 Jars of +10 washings.

39 015341 Hartland. Blackfellows Arm. 5·7·79.
15" - 24" down hole (PHB). Washed by Victor Dobos. Collected on 13·11·77. Described in field notes as "brown glauconitic clay, getting darker as one goes down the hole."

40. 894306 Bairnsdale (1:63,360) 200 yds. upstream N. of Quarry Landing Mississippi Ck. PHB. Sample. Fawn - mousey grey friable silty clay. Washed by Victor Dobos. More than usually shelly and quite glauconitic. Comparable with NS. 27.

WEEK 24 . 165-201 TUESDAY 13

41. Ritchie's Cutting, "Lower Sample". This is an old sample, collected probably in 1974 and is the companion of a "Ritchie's Cutting, Upper Sample", that is not in the NS. series. Fawn silty clay, washed by Victor Dobos. There is a small amount of fine-grained glauconite in the +80 Residue.

42. Swan Reach. The type outcrop of the Jambo R. Formation. Sample collected in May 1979 and washed by Victor Dobos. The sample is from 2ft. above road level at the N. end of the outcrop. On the day we visited the locality, the face had been recently cleaned by a road scraper and the bank of talus which has, for years, masked the lower part of the outcrop, had been removed. This sample is of the lowest soft material available; below it was limestone and I couldn't penetrate the floor with a PHB.

14 WEDNESDAY WEEK 24 . 166-200

43 054330. Sample from the headland between the 2 "arms" of the first deep inlet S. of Trident Arm. There is a house on the S. side of this inlet. It is in JPF and is in the area of what appears to be a minor horst because the USB cannot be traced through this area. At 054330, JPF is overlain by HHG without any USB being visible. Fawn + grey clay, slightly chalky due to weathering. Washed by Victor Dobos.

44 894300. Sample from wombat burrow about 100m. S. of foot of inclined track Fawnish-grey silty clay with decomposed shells. Washed by Victor Dobos. The +80 is uniformly v. fine grained.

15 THURSDAY WEEK 24 . 167-199

45. 055350. Nowa Nowa Arm. Locality of apparent diastem within Long Point Formation. This is Sample A from above the limestone. It contains a fair proportion of forams. Washed by Victor Dobos.

46 055350. Nowa Nowa Arm. Locality of apparent diastem within Long Point Formation. This is Sample B from below the limestone. It is decidedly deficient in forams, there being none in the +30 conc.

47 016435 Hartland. Soft bed in Tildesley Fm. 4 ft. above water level, ie. above granule conglom. at that locality. Fine grained brown sand. Washed by Victor Dobos.

48 903291. North Arm. Little steep point where JPF overlies TAF. Brown + faintly olive green (+ minor fawn) glauconitic clay. Washings contain glauconitic sand + shell fragments + some calcareous nodules. This sample was probably collected in Nov. 1977. Washed by Victor Dobos. Compare it with NS.27 which is more genuinely from base of JPF & probably came from a foot or so higher than this one

3 ft. DOWN.

49 993330 Toorloo Arm, Lake Tyers. PHB sample at a locality where the JPF overlies the TAF. PHB started in JPF + was drilled in Nov. 1977 when the lake level was very low. This sample is from 3' down the PHB hole. This and the following samples were washed by Victor Dobos.

50 993330, 2'9" down PHB hole. Toorloo Arm, Lake Tyers. Medium quartz sand & lots of brown fragments in +30. See also NS.49 & NS. 51-54

19 MONDAY WEEK 25 . 171-195

51 993330. 2'6" DOWN PHB HOLE. Toorloo Arm, Lake Tyers.

52. 993330. 2' down PHB hole. Toorloo Arm. Lake Tyers.

20 TUESDAY WEEK 25 . 172-194

53 993330, 4'3" down PHB hole. Toorloo Arm, Lake Tyers.

54 993330, 1 ft. down PHB. hole. Toorloo Arm, Lake Tyers.

WEEK 25 . 173-193 WEDNESDAY 21

55 995339 This is a locality where there is an apparent diastem in the Long Point Fm. with discoidal bryozoan colonies + Cellepora living on it. There is no foram. sample from this locality, only a jar of megafossils + a couple of lst. nodules.

56 Jemmys Point Road Cutting
Sample 12.

WEEK 25 . 174-192 THURSDAY 22

57 Jemmys Point Road Cutting.
Sample 13

58 Jemmys Point Road Cutting
Sample 14.

23 FRIDAY WEEK 25 . 175-191

59 Jemmys Point Road Cutting. Sample 16

60 Nyerimalang Jetty. J.P.F. at beach level.

24 SATURDAY WEEK 25 . 176-190 WEEK 26 . 177-189 SUNDAY 25

Nativity of St. John Baptist 4th After Trinity

61 Beaumaris. Level 3 or 4 (not clear from outcrop.) South of Keefers boatshed. See NS. 25 for sketch.

62. Beaumaris. N. of Boat Club. Level 4.

WEEK 26 . 178-188 MONDAY 26

63 Loxton, S.A. 5·9 - 6·0 m down PHB hole at Packard Bend, Ref. 583873 (Renmark 1:100,000) This is the bottom sample from the PHB hole. Grey clay & shell fragments No quartz silt. This sample was re-numbered NS.158, to keep all the Loxton PHB samples together. 7·9·79 (3·3·1981)

64 Loxton dist, about 17km. NW of Loxton. Field notes quote Sect.214, Hd. of Pyap. Brown clay in hollow in top of hard Turritella Lst. In the field it was greenish brown, but the green colour disappeared. Contains brown nodules a higher proportion than in NS.65. Wet test for phosphate done on 8·10·79 was done on this sample. 7·9·79

WEEK 26 . 179-187 TUESDAY 27

65 Loxton district, about 16km. NW of Loxton Field notes quote Sect 214 Hd. of Pyap. Brown clay with nodules, 15cm - 30cm above lst. base of Bookp. Fm., but not filling hollows in lst. Intended to show contrast (if any) between this & NS 64 which was greenish in field + filled hollows in lst. 10·9·79 474936 MOOROOK

66 Loxton district, Sect. 142 Hd. of Pyap, about 16 km NW of Loxton. White clay obtained by PHB, 0-30 cm. below river level. Approx 1·0 - 1·3 m below the base of the section recorded by Ludbrook (1961. p.)

JUNE. Th 1 F 2 Sa 3 Su 4 | M 5 Tu 6 W 7 Th 8 F 9 Sa 10 Su 11 | M 12 Tu 13 W 14 Th 15 F 16 Sa 17 Su 18 | M 19 Tu 20 W 21 Th 22 F 23 Sa 24 Su 25 | M 26 Tu 27 W 28 Th 29 F 30

28 WEDNESDAY — WEEK 26 . 180-186

67 Brown, green + grey clay from sample labelled 12'-13' in the field (actually deeper) from PHB hole at Packard Bend, Loxton, 583873 Renmark. This sample was renumbered NS. 158, to keep all the Loxton P.H.B. samples together. 14·9·79 → 3·3·1981

68 Bookpurnong Fm. Type loc. Sect 11, Hd. Pyap. "Operculina bed", the lowest of the 3 conspicuous beds of the B.F. Placed in H_2O_2 on 14·9·79.

29 THURSDAY — St. Peter's Day — WEEK 26 . 181-185

69 853582 Carrajung. Boundary Rd, Darriman. This sample was washed a long time ago but was given an NS. number on 5·10·79. White limestone. "Lower Hole, Bag 4". Collected & washed in 1976. This is the sample already numbered NS. 14

70 Hunters Point, North Arm. Matrix of megafossils, but since the outcrop is so low, contamination from higher levels is unlikely.

71 Tambo R. Fm. Swan Reach. Richly glauconitic bed containing abundt. Mesopeplum & Cidaroid radioles immediately below the lowest continuous hard lst. bed of Bumberrah Member and virtually the base of the Bumberrah Member.

853068 BAIRNSDALE. 1:100,000

72 Jemmys Pt. Highway Sect., 3m below bed e of Singleton, 1941. Sample taken about 50 E. of where P. Hwy. turns W. immediately after crossing bridge. Fawn silty clay with irreg. calc. nodules.

1 SATURDAY WEEK 26 . 183-183 WEEK 27 . 184-182 SUNDAY 2

5th After Trinity

73 983355 Hartland = 932149 Orbost, 1:100,000
Bend of Toorloo Arm, N. of Burnt Bridge
Moormurng Member of Tambo River formation.

74 985347 Hartland. 5'-6' below oyster bed.
This is an old sample put into the NS. series on 14-12-79.

3 MONDAY WEEK 27 . 185-181

75 048411 Hartland. The "furthest upstream" occurrence of Bairnsdale Limestone. (= 991201 Orbost, 1:100,000) [illegible] 18-3-82

76 015337 Hartland. Blackfellows Arm. Picked by Paul Harrison. 14-12-79. The sample was originally NS.11 but was given a new identity because of an error in the grid ref.

4 TUESDAY WEEK 27 . 186-180

77 998309 HARTLAND = 946104 ORBOST 1:100,000 USB OF J.P.F. at Fishermans Arm. Lake Tyers.

78 995339 HARTLAND 30 - 45 cm below water level, into the calcareous nodule bed.

WEEK 27 . 187-179 WEDNESDAY 5

79 995339 HARTLAND 1m above layer of calcareous nodules.

80 995339 HARTLAND Landslip scar 25m above water level. Fine sand with calcareous nodules

WEEK 27 . 188-178 THURSDAY 6

81 995339 HARTLAND. Within Below layer of calcareous nodules, 40 cm below water level. From a different hole from NS.78 but only about 1m away. This sample was obtained primarily as a glauconite sample.

82 905293 BAIRNSDALE. NORTH ARM PHB. 0·5 - 1·0 m. down hole, ie. below water level.

JLY.	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

83 995339 HARTLAND. 45cm below water level, in calcareous nodule horizon. Toorloo Arm "diastem locality". Long Pt. Fm. 3 Jars of silty sediment, when washed.

84 992332 HARTLAND. Toorloo Arm. 30 - 45 cm down PHB which started in nodule bed. Washed by Victor Dobos, Dec. 1979. Conc'd by ANC & Anne-Marie Keep, 21.5.80

85 Tram Cutting, Mississippi Ck. 2.2 - 2.3 m below floor. Washed by Victor Dobos, Dec. 1979. Conc'd by ANC & Anne-Marie Keep, 21.5.80. Coarse resid. contains lots of oyster shell + limestone fragments. & a few pectinids - sent to Alan Beu.

86 905293 BAIRNSDALE 1:63,360. NORTH ARM 1.0 - 1.5 m down PHB Washed by Victor Dobos, Dec. 1979. Conc'd by Anne-Marie Keep, 21.5.80

WEEK 28 . 192-174

MONDAY 10

87 The Lower Shell Bed (locally exposed) at the northern end of the Maringa Ck track.
Washed by Victor Dobos, Dec. 1979. Conc'd by Anne-Marie Keep, 21-5-80

88 903291 Bairnsdale 1:63,360. North Arm, "Little Steep Point". 1m above water level, 30 cm. above phosphatic nodule bed. The sample is predominantly clay, not much silt.
Washed by Victor Dobos, Dec. 1979. Conc'd by Anne-Marie Keep, 21-5-80

WEEK 28 . 193-173

TUESDAY 11

89 1m below base of flaggy limestones, 200 m east of Kalimna Jetty.
Washed by Victor Dobos, Dec. 1979. Conc'd by Anne-Marie Keep, 21-5-80

90 Tambo River Formation, Bumberrah Mbr. W. Dec. 79.
400 m. upstream from Johnsonville Punt. Conc. 22-5-8

12 WEDNESDAY WEEK 28 . 194-172

91 "Kurtuk", Moormurng (= "Carinya" of 1955)
1 m. above top of Bairnsdale Limestone

92 Lower shell bed. Abt. 17ft. above Water level at Godsall's Point, North Arm. W. 23·5·80
JPF, Grey & brown mottled clay, almost devoid of sand & silt. Ref. 865075 Bairnsdale 1:100,000.

13 THURSDAY WEEK 28 . 195-171

940126 ORBOST 1:100,000
93 992332 Hartland, 40cm. above top of PHB at water level, from PHB hole into side of wombat burrow. Base of Jemmys Point Fm.
940126 Orbost, 1:100,000

859051 BAIRNSDALE 1:100,000
94 =905293 Bairnsdale 1:63,360. North Arm.
"Whalebone locality"
1·5m – 1·8m. down PHB hole.

WEEK 28 . 196-170 FRIDAY 14

95 Tram Cutting, Mississippi Ck. 1·5m below floor Grey sediment, contains a lot of charcoal, mica & in the +10 & +30 fractions there are little sst. pebbles

96 Bunga Ck., West side. PHB sample 50 cm below lowest outcropping level, near west end of bridge

15 SATURDAY WEEK 28 . 197-169 WEEK 29 . 198-168 SUNDAY 16

7th After Trinity

97 West end of Godsall's Point, North Arm 910275, Bairnsdale, 1:63,360, 30 cm. above W.L. Lower stratigraphically than NS. 92, but probably younger than Hunter's Point.

98 932141 ORBOST = 985347 Hartland. ("Big Brachiopod loc.") 4'–5' below oyster bed. Soft friable glauconitic brown clay.

Washed 25·5·80 Conc'd 28·5·80

17 MONDAY WEEK 29 . 199-167

99 836106 Bairnsdale, 1:100,000. Tram Cutting, Mississippi Ck. Brown clay. 2·0 – 2·2 m below floor.

100 950100 ORBOST 1:100,000. Upper Shell Bed of J.P.F. at Fisherman's Arm, Lake Tyers. (USB.1) Grey, micaceous, carbonaceous silty clay w/ shells. (= 003304 Hartland)

18 TUESDAY WEEK 29 . 200-166

101 836106 Bairnsdale 1:100,000. Tram Cutting, Mississippi Ck., 1·8 – 2·0 m below floor. Brown clay.

102 Tram cutting, Mississippi Ck. 1·5 – 1·8 m below floor. Mousey-brown clay with shell fragments. Clay predominance is attested by the small quantity of washed material.

WEEK 29 . 201-165

WEDNESDAY 19

103 Tambo River Fm, Moormurng Member. 500 m downstream from Johnsonville Punt, Tambo River. Pale Creamy-fawn clay.

Washed Dec. 1979

Conc'd 29:5:80

104 North side, Boggy Ck. Bluff, Parish of Wy Yung. 4m below highest 1st. bed in situ. Taken to be within Bairnsdale Limestone.

WEEK 29 . 202-164

THURSDAY 20

105 =992332 Hartland, 1:63,360. Toorloo Arm. 0-15 cm. in PHB hole starting in the nodule bed.

106 940126 ORBOST 1:100,000
=992332 Hartland, 1:63,360. Toorloo Arm 15-30 cm in PHB hole starting in the nodule bed.

Washed Dec. 1979

Conc'd 29:5:80

21 FRIDAY WEEK 29 . 203-163

107 Upper shell bed in the Maringa Ck. section, about ½ way along the section, a bed of shells, shell grit and sand, about 2 m below the East Bunninghame Member. Check measured sections for actual proportions of section. conc'd 4.6.80

108 Upper shell bed of Jemmys Point Fm (USB2 at Lake Tyers) at 001313 Hartland. check! (17.3.81.)

22 SATURDAY WEEK 29 . 204-162 WEEK 30 . 205-161 SUNDAY 23

St. Mary Magdalen 8th After Trinity

109 Long Point. 934133 ORBOST, 1:100,000. An old sample, washed before the NS series started. Sample 8 of 11.5.74, given the no. NS. 109 on 6-6-80. Sample from socket of fallen tree, 5 m. above water level.

110 Nowa Nowa Arm. 052391 Hartland = 994182 Orbost, 1:100,000. Clay bed in Bairnsdale Limestone. Coll. Nov. '77 Washed Aug. 1980

WEEK 30 . 206-160

MONDAY 24

111

Long Pt. Fm., Solitude Bay. 999147 Orbost (=057352 Hartland) 4-gallon drum sample. Sample 2 of :11:80, from PHB hole in socket of fallen tree. Same locality as NS.25.

Washed 1-3:12:1980 by A.N.C.

112

Mouth of Boggy Ck, Mitchell Valley, North side. About 5m above river level and 10m below the outcropping base of the Bairnsdale Limestone. Ref. 489151 Bairnsdale 1:100,000. Shelly, clayey, silty fine sand.

Washed by Stefica Andrijanic 8:12:80

Coll. 2:11:80

WEEK 30 . 207-159

St. James' Day

TUESDAY 25

113

LOXTON, S.A. PHB at Packard Bend. Field depth 5'-6'. Grid Ref. 583873 Renmark

114

Tambo R., Ref. 750164, Bairnsdale, 1:100,000 Cliff on east side of bend Tambo River, 3 km. upstream from Swan Reach. 20 cm. above water level.

JLY. | Sa 1 | Su 2 | M 3 | Tu 4 | W 5 | Th 6 | F 7 | Sa 8 | Su 9 | M 10 | Tu 11 | W 12 | Th 13 | F 14 | Sa 15 | Su 16 | M 17 | Tu 18 | W 19 | Th 20 | F 21 | Sa 22 | Su 23 | M 24 | Tu 25 | W 26 | Th 27 | F 28 | Sa 29 | Su 30 | M 31

26 WEDNESDAY — WEEK 30 . 208-158

115 Tambo River, Ref. 750164, Bairnsdale, 1:100,000 12.12.80
Cliff on east side of bend of Tambo River, 3 km. upstream from Swan Reach. 60 cm. above river level. "Stop 5, 7:11:80".

116 Clay bed in Bairnsdale Lst. at Ref. 507137 Bairnsdale. 500 m downstream from Dreier's. 60 cm above river level. Coll. 3.11.80.

27 THURSDAY — WEEK 30 . 209-157

117 "Dreier's", Mitchell River, about 2m below lowest continuous hard limestone bed. Ref. 500146, Bairnsdale, 1:100,000. About 4m above water level. Coll. 3.11.80.

118 "Dreier's", Mitchell River, about 3 m. below lowest continuous hard limestone bed and about 3 m. above water level. Coll. 3.11.80 Ref. 500146 Bairnsdale 1:100,000.

WEEK 30 . 210-156

FRIDAY 28

119 The locally Lower Shell bed at Lake Bunga, near the eastern end of the old bridge. Coll. 5·11·80.

120 Lake Tyers. "First outcrop of J.P.F. at water level, SW of Trident Arm launching-place". 998134 Orbost 1:100,000 (Sample 4, 6·11·80)

29 SATURDAY WEEK 30 . 211-155

WEEK 31 . 212-154 SUNDAY 30

9th After Trinity

121 Lake Tyers. Ref 992133 Orbost 1:100,000 "Point across Nowa Nowa Arm, NW from Trident Arm". Jemmys Point formation at water level on S. side of point. Sample 3 of 6·11·80

NS 122 Lake Tyers, Toorloo Arm, "Grosse-brachiopod" locality. Refs. 986347 Hartland = 932141 Orbost 1:100,000 PHB sample No. 1. 1·0-1·25 m down hole. (1·0m down the hole = water level. Coll. 5:11:80

123 Same locality as NS. 122. PHB Sample No. 2. 1·25 - 1·40 m. down hole.

JLY. Sa 1 Su 2 M 3 Tu 4 W 5 Th 6 F 7 Sa 8 Su 9 M 10 Tu 11 W 12 Th 13 F 14 Sa 15 Su 16 M 17 Tu 18 W 19 Th 20 F 21 Sa 22 Su 23 M 24 Tu 25 W 26 Th 27 F 28 Sa 29 Su 30 M 31

31 MONDAY — WEEK 31 . 213-153

124	Same locality as NS.122. Sample No. 3. 1·40 – 1·55 m down hole.	A shelly interval
125	Same locality as NS.122. Sample No.4 1·55 – 1·75m down hole.	
126	Same locality as NS.122. Sample No. 5 1·75 – 2·0 m down hole.	considerably more glauconitic than overlying samples.
127	Same locality as NS.122. Sample No.6 2·0 – 2·25 m down hole.	also glauconitic
128	Same locality as NS.122. Sample No. 7 2·25 – 2·30m down hole. Drilling ceased because of water inflow which prevented sample retention.	also glauconitic

1 TUESDAY — WEEK 31 . 214-152

129	Donovan's Landing, Glenelg River, S.A. Fine-grained grey sediment from what appears to be a Pliocene o Pleistocene former channel of the Glenelg. From cliff at Parking area at about 5 m above river level.	Grey silty clay
130	Donovan's Landing, Glenelg River, S.Aust. Coarse sand adjacent to NS.129. Same locality as NS. 129.	

131 Seacliff – Marino, South Australia.
Recent, Beach sand.

132 Kingston, S.E. South Australia.
Recent, Beach Sand, from the vicinity of the Cape Jaffa Lighthouse and camping ground

133 Grange, South Australia
Recent, Beach sand

134 Lakes Entrance Oil Shaft. Ref. 876087 Bairnsdale 1:100,000. Samples from Denis Belford, B.M.R. 1980. 212 ft and 380ft. 212' contains several Rosalina mitchelli, ∴ seems to have Mitchellian affinities rather than Kalimnan. No significant pelagic forams & no keeled Globorotalias.

380' contained virtually nothing.

135 L.E.O.S. as for NS.134. 408' & 576'
408' contained precisely 10 forams. Group
576' is the type level of G. conica Jenkins and contains a well preserved fauna.

136 Glenelg Group, southwestern Victoria.
Sample from the west bank of a tributary of the Crawford River, Ref. 392216 Dartmoor 1:63,360. PHB Sample from the "bergschrund" of a land slip.

4 FRIDAY WEEK 31 . 217-149

137 Outcrop on W. bank of Glenelg R. at Dartmoor Railway Bridge. Ref. 267234 Dartmoor 1:63,360. Grey clay of Glenelg Gp. Coll. ·12·80

138 Dartmoor CRB Quarry. Matrix of Pectens. Ref. 275227 Dartmoor 1:63,360. Coll. ·12·80

5 SATURDAY WEEK 31 . 218-148

WEEK 32 . 219-147 SUNDAY 6 10th After Trinity Transfiguration of Our Lord

139 Port Willunga, South Australia. "P.W. Beds" about 100 m. north of old jetty, 1m above beach level. Bed of brownish-grey clay. Coll. ·1·81

140 Skinner's, Mitchell R. Sample from about 60 cm. above water level. Coll ANC & JJC about 1975. Coll. ·11·80

WEEK 32 . 220-146 — Bank Holiday (N.S.W. & A.C.T.) — MONDAY 7

141 Skinner's, Mitchell River. Sample of 5:11:80, 4·5 m. above river level. This sample is from just below a hard bed of lst. or ferrug. sst., about 20cm. in thickness. This sample is of fine sandy clay with limonite flakes.

142 North bank of Mitchell River, west of Boggy Ck, where high land comes right to river bank. Ref. 471143 Bairnsdale 1:100,000. Approx. 3m above river level. Sparsely shelly fine silty clay, yielding reasonable foram. concentrates. Coll. 11.80

WEEK 32 . 221-145 — TUESDAY 8

143 N.E. end of "The Island", Mitchell Valley, Ref. 475142 Bairnsdale 1:100,000. Soft sediment below lowest outcropping limestone bed. Blackberry thickets prevented the river frontage of "The Island" from being sampled. Coll. ·11·80

144 Devil's Hole, Nowa Nowa Arm. Ref. 994194 Orbost 1:100,000. A small, rather calcareous sample coll. from about 60 cm. above water level. (in 1975)

AUG. Tu 1 W 2 Th 3 F 4 Sa 5 Su 6 M 7 Tu 8 W 9 Th 10 F 11 Sa 12 Su 13 M 14 Tu 15 W 16 Th 17 F 18 Sa 19 Su 20 M 21 Tu 22 W 23 Th 24 F 25 Sa 26 Su 27 M 28 Tu 29 W 30 Th 31

9 WEDNESDAY WEEK 32 . 222-144

145 South end of Myrtle Point cliff, Ref. 465144 Bairnsdale, 1:100,000. PHB sample from 3·0 - 3·2 m below floor of track.

146 Loxton, S.A., P.H.B. at Packard Bend, Ref. 583873 Renmark, 1:100,000. Field depth: 0 - 1 ft.

147 Loxton, S.A. P.H.B. at Packard Bend. Field depth: 1 - 2 ft.

10 THURSDAY WEEK 32 . 223-143

148 Field depth: 2 - 3 ft. Brown sediment. Few bivalve fragments, not much silt. Big polished quartz grains in +30.

149 Field depth: 3 - 4 ft.

150 Field depth: 4 - 5 ft.

151 Field depth: 5 - 6 ft. Also numbered NS.113

"Field depth" means the depth written on the sample bags at the time of collection. They need slight adjustment, e.g. the hole was in fact 19'6" deep, not 18' as field labels suggest.

AUGUST 1972

152 Loxton, S.A., P.H.B. at Packard Bend
Field depth: 6-7 ft. Fine shell grit & large polished quartz grains in +30

153 Field depth: 7-8 ft. Shelly fine sand & clay contains some nice Neotrigonia.

154 Field depth: 8-9 ft. Plenty large polished quartz grains in +30. Fragments of large bivalves solitary corals and a beautiful Odontaspis tooth in +10. Grey silty clay. Much +80 silt.

155 Loxton, S.A., P.H.B. at Packard Bend.
Field depth: 9-10 ft. Bio. debris + pd. qtz. grains in +30. Much silt in +80. Very few shell fragments in +10.

156 Field depth: 10-11 ft.

157 Field depth: 11-12 ft.

158 Field depth: 12-13 ft. Also numbered NS. 67
Greenish brown limonitic clay, no sand in +30

159 Field depth: 13-14 ft.

14 MONDAY WEEK 33 . 227-139

160 Loxton, S.A., P.H.B. at Packard Bend
Field depth: 14'-15'.

161 Field depth: 15'-16'

162 Loxton, S.A., P.H.B. at Packard Bend
Field depth: 16'-17'. This sample is shelly.

163 Field depth: 17-18'.

15 TUESDAY WEEK 33 . 228-138

164 South end of Myrtle Point cliff. Ref.
465144 Bairnsdale 1:100,000. Sample
from bank beside track, as far south
as the sediment could be guaranteed
in situ. Incidentally, it is as low, stratigraphically,
as is possible on this track & at the S. end.

165 Sample of unknown provenance, but prob.
May 1979, labelled 910278, i.e. Hunter's
Point on the Bairnsdale 1:63,360 Sheet.
+10 contains Kalimnan shells with
Mesopeplum. Washed by Stefica Andrijanic. Feb. 15

WEEK 33 . 229-137 WEDNESDAY 16

166 Long Point, Toorloo Arm. 986338 Hartland = 934133 Orbost 1:100,000. Sample from the socket of a fallen tree, coll. by PHB, about 2 ft above W.L. and about 30 ft. (at least) below the phosphatic nodule bed.

167 Original label reads: "986345 Hartland Location 2, 24:8:74, 3ft. down, 4ft. above W.L." It has all the indications of a PHB sample west of Grosebrachiopod locality and it appears to be Nyerimalang Formation.

WEEK 33 . 230-136 THURSDAY 17

168 Jervis Bay, Recent. Ref. 741690, 1:100,000. Sample 5, July 1980

169 Jervis Bay, Recent. Ref. 740760, 1:100,000. Sample 6, July 1980

170 Burraneer Bay. Recent. North end of bay, virtually LWM

171 Lake Tyers. Ref. 001313 Hartland. Shell bed sediment fallen to beach. i.e. USB of JPF. An old sample, Coll. 10.5.74 but given an NS. number on 7:5:81.

AUG.	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

18 FRIDAY WEEK 33 . 231-135

172 Fossil Beach, Balcombe Bay.

173 Spring Ck., Minhamite, Victoria. 1 ft. below base of tuff. (and about 2ft above nodule bed & unconformity. 14:5:81

19 SATURDAY WEEK 33 . 232-134 WEEK 34 . 233-133 SUNDAY 20 12th After Trinity

174 Solitude Bay, Lake Tyers. Sample 1 of 6:11:80. Refs. 998145 Orbost, 1:100,000. (= 056351 Hartland) 15:5:81

175 Beaumaris, Level 1. of 30:11:77. Fawn clay below nodule bed. See section accompanying sample NS.24 in this book. "Bairnsdalian" 15:5:81

WEEK 34 . 234-132 MONDAY 21

176 off Jervis Bay. Ref. 828621 (1:100,000) 100 metres water depth. Sample 1, 8·7·80 15:5:81

177 Toorloo Arm, Lake Tyers. Ref. 945121 Orbost, 1:100,000 = 998326 Hartland. Sample coll at beach level. Grey & fawn ("sticky") clay of lower part of J.P.Fm. Sample coll. 11:5:74; an old sample given an NS. number on 9:6:81.

WEEK 34 . 235-131 TUESDAY 22

178 Moorabool River, west of Madden's. Sample M1 of 27:5:1955. Base of Bed 11. "5ft. of grey clay".

179 Moorabool River, west of Madden's. Sample M2 of. 27.5.55. Base of Bed 18. "1 ft. of compact grey clay".

180 M3 of 27.5.55. Base of Bed 22 "6ft. of grey clay"

181 Moorabool River, west of Madden's. Sample M4 of 27:5:1955. Top of Bed 24 "14 ft. compact grey clay."

AUG. Tu 1 W 2 Th 3 F 4 Sa 5 Su 6 | M 7 Tu 8 W 9 Th 10 F 11 Sa 12 Su 13 | M 14 Tu 15 W 16 Th 17 F 18 Sa 19 Su 20 | M 21 Tu 22 W 23 Th 24 F 25 Sa 26 Su 27 | M 28 Tu 29 W 30 Th 31

23 WEDNESDAY WEEK 34 . 236-130

182 North side of Moorabool River, west of Madden's. Sample M5 of 27:5:1955. Base of Bed 24, "14ft. compact grey clay"

183 M6 of 27:5:55. Top of Bed 26. "5ft. of compact grey clay".

184 M7 of 27:5:55. Base of Bed 28. "5ft. of grey clay, sparsely polyzoal".

185 M8 of 27:5:55. Top of Bed 32. "7ft. of polyzoal clay"

24 THURSDAY St. Bartholomew's Day WEEK 34 . 237-129

186 M9 of 27:5: Bed. 34. "1 ft. of polyzoal clay".

187 M10 of 27:5:55 Top of Bed 37. "6ft. of polyzoal marl."

188 M. 11 of 27:5:55. Bed 40. "6" dark grey clay"

189 M. 12 of 27:5:55. 3ft below top of Bed 41 "Lepidocyclina limestone."

WEEK 34 . 238-128 FRIDAY 25

190 Maretimo back track. Yellow marl 2ft. below top bed of section. 8·12·52

191 Curlewis. "Black clay"

26 SATURDAY WEEK 34 . 239-127 WEEK 35 . 240-126 SUNDAY 27

13th After Trinity

192 Curlewis.

193 Torquay. Approx. 30ft. above contact between Jan Juc & Puebla Fms.

AUG. Tu 1 W 2 Th 3 F 4 Sa 5 Su 6 M 7 Tu 8 W 9 Th 10 F 11 Sa 12 Su 13 M 14 Tu 15 W 16 Th 17 F 18 Sa 19 Su 20 M 21 Tu 22 W 23 Th 24 F 25 Sa 26 Su 27 M 28 Tu 29 W 30 Th 31

28 MONDAY

WEEK 35 . 241-125

194 Torquay. Approx. 42 ft. above contact between Jan Juc & Puebla Fms., from cliff about 100 yds. N. of Bird Rock. Coll. ANC & PRK. 30·8·54

195 Torquay. Approx. 72 ft. above "contact" between Jan Juc & Puebla Fms., from cliff about 100 yds. N. of Bird Rock.

29 TUESDAY

WEEK 35 . 242-124

196 Torquay. Point Danger, Soft clay bed under hard overhanging ledge.

197 Mornington - Manyung Rocks locality

WEEK 35 . 243-123

WEDNESDAY 30

198 Balcombe Bay, Fossil Beach, N. end., about 30 yds. South of Measured Section A. "Just below transition from marine to restricted marine". ANC. 14:1:56. S.R. No. 177.

199 Geelong District. Dump from sewerage excavation at corner of Geelong Rd. & Bacchus Marsh Road. about 10 ft. below surface.

WEEK 35 . 244-122

THURSDAY 31

200 Geelong. Cliff at east end of Swinburne Ave.

201 Geelong District. Aust. Cement Quarry. Top 2ft of clay overlying 1st. at South side of Quarry.

1 FRIDAY — WEEK 35 . 245-121

202 Longford. Gippsland Cement & Lime Co. quarry in Allot. 8A, Parish of Coolungoolun

203 Longford. Gippsland Cement & Lime Co. quarry in Section 1 of Allot. 36, Parish of Glencoe.

2 SATURDAY WEEK 35 . 246-120 — WEEK 36 . 247-119 SUNDAY 3

14th After Trinity

204 JERVIS BAY. HOLOCENE. Sample 3 of 7·7·81. Ref. 760672. "South east" of Longnose Point. Coarse "yellow" sand. 35m water depth

205 JERVIS BAY. HOLOCENE. 7·7·81. Ref. 731635. 18m. water depth

206 JERVIS BAY, HOLOCENE. 7·7·81. Ref. 742700. (1:50,000) 22m. water depth.

WEEK 36 . 248-118

MONDAY 4

207 JERVIS BAY, HOLOCENE. 7·7·81. Ref. 747765 (1:50,000) 12m. water depth

208 JERVIS BAY. HOLOCENE. 7·7·81. Ref. 740631 (1:50,000) 16m. water depth "Orange Bin".

209 OFF JERVIS BAY, Long.150° 58·9'E. Lat. 34°4·9'S. 150m water depth. 8·7·81

WEEK 36 . 249-117

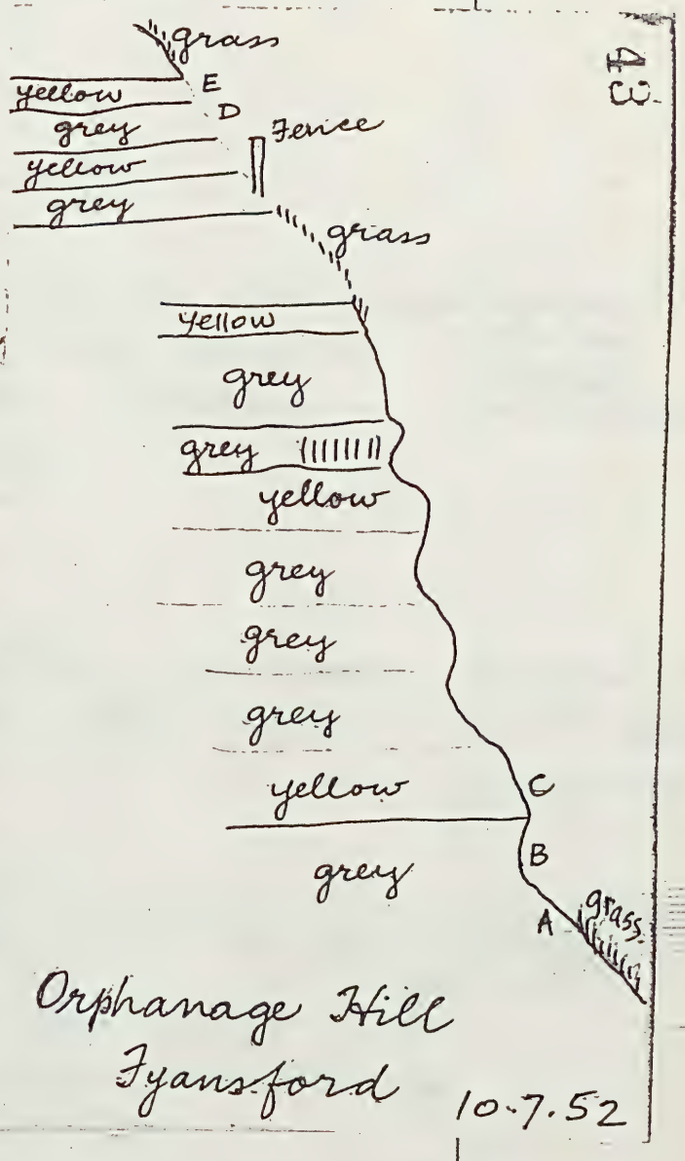
TUESDAY 5

210 "New Quarry" Batesford, (i.e. the large cement quarry). East end on south side. Dark grey clay containing Lepidocyclina, approx. 10ft. above top of limestone. A pre-1960 sample given an NS. number on 28·7·81)

211 Skinner's, Mitchell River. East end of section. Channel sample 0'-5' above river level. (This is a pre-1960 sample, given an NS. number on 28·7·81)

6 WEDNESDAY

212 Orphanage Hill section, Fyansford. Sample B. 10·7·52. Orange field book p. 43.



213 Orphanage Hill. Sample C. 10·7·52

214 Orphanage Hill. Sample D. 10·7·52

7 THURSDAY

215 Orphanage Hill Sample E. 10·7·52

216 Green clay overlying Bairnsdale Limestone on top of cliff, Tambo R., 3 km. N. of Swan Reach. Ref. 750164 Bairnsdale 1:100,000. On property of J.R. Cunningham. Presumed Tambo River Formation.

217 Off Jervis Bay. Sample 1 of 21:11:81

218 Off Jervis Bay. Sample 2 of 21:11:81. Coarse sand & shells.

WEEK 36 . 252-114 FRIDAY 8

219 Off Jervis Bay, Sample 3 of 21:11:81

220 Tram Cutting, Mississippi Ck. 60cm below phosphatic nodule bed. Ref. 836106 Bairnsdale 1:100,000. Washed in NaOH for ^{13}C analysis. Washed, K Fisher. Picked M. Jamieson

221 East side of Trident Arm. 60cm below phosphatic nodule bed. Ref 001137 Orbost 1:100,000 Washed in NaOH. Kathy F. approx. 1·12·81

9 SATURDAY WEEK 36 . 253-113 WEEK 37 . 254-112 SUNDAY 10

15th After Trinity

222 East side of Trident Arm, almost horiz. hole with PHB into phosphatic nodule bed. Ref. 001137 Orbost 1:100,000

223 Toorloo Arm, Ref. 998326 Hartland (=945121 Orbost). Low in J.P.F.

224 Rodd cutting on east side of Bunga Ck. 5m (=15') above bridge level. This 5m. is covered interval, and the sample is from the lowest shell bed in the section

SEPT.	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			

11 MONDAY WEEK 37 . 255-111

225 Nowa Nowa Arm, Ref 052367 Hartland (=994159 Orbost. : "Grossepecten" Locality) Washed in NaOH for ^{13}C analysis.

226 Nowa Nowa Arm, [Ref. 060362 Hartland =002156 Orbost]. "Green glauconite" locality. Washed in NaOH.

227 Nowa Nowa Arm, Ref. 052391 Hartland = 994182 Orbost. Soft bed in Bairnsdale Limestone. Washed in NaOH.

228 Nowa Nowa Arm, Ref. 058360 Hartland = 000154 Orbost. Washed in NaOH

12 TUESDAY WEEK 37 . 256-110

229 Nowa Nowa Arm, Ref. 056351 Hartland. Solitude Bay. Washed in NaOH = 998145 ORBOST, 1:100,000

230 Nowa Nowa Arm, SW "corner" of Trident Arm Ref. 998134 Orbost, 1:100,000. Jemmys Point Formation. Washed in NaOH

231 McRae's Quarry road. Clay-rich bed at transition from bryozoal facies to shelly facies. Washed in NaOH.

WEEK 37 . 257-109 WEDNESDAY 13

232 Base of section at 001313 Hartland, 1m. above water level, at base of "40cm fawn & grey clay." See field notes of 5:11:81. Washed in NaOH.

233 Ritchie's cutting. About 2m. above phosphatic nodule bed. Washed in NaOH

234 "Upper pecten bed" about 3m above road level at T.R.F. type locality, Swan Reach. Washed in NaOH

WEEK 37 . 258-108 THURSDAY 14

235 "Upper shell bed", Jemmy's Point rodd cutting, Princes Highway.

236 Kana Keoki. 82-03-16-03. Stn. 24, PCOD 7, Core catcher, base of core Stiff brown clay. 1-4/6/82

237 Anchor mud, Vila harbour

238 Kana Keoki. 82-03-16-03. Stn. 19. PCOD 5 core catcher. 1115 GMT 25.4.82 3400 m. 13°57·94'S, 173°58·44'E at start of core. Core was about 10m in length.

SEPT. F 1 Sa 2 Su 3 M 4 Tu 5 W 6 Th 7 F 8 Sa 9 Su 10 M 11 Tu 12 W 13 Th 14 F 15 Sa 16 Su 17 M 18 Tu 19 W 20 Th 21 F 22 Sa 23 Su 24 M 25 Tu 26 W 27 Th 28 F 29 Sa 30

239 Suva Marl. A dark grey compact mudstone. Exact locality unknown Coll. by Solly Kusfanowich (= Solly Keston) in the mid-1960's.

240 Suva marl. C. 3292 Dovi Road Lowcala Beach "EOT". 4cm below Bed 610, 32·7m above the Purple marker. Upper Suva Marl. from Peter Rodda. Light grey compact mudstone.

C.3135

241 Above the Suva Marl. Waila, near pumping station, Near Nausori. "As C. 2024, but next road cut along, like C.3132." N. 21 - N. 22. From Peter Rodda

242 Suva Marl. C.3312. "20 cm below Bed 478, = C.3220 of Kennett (in the Kennett & Rodda paper). Just below the purple marker, ie. 6·5 - 7m below purple marker. Road transport office, Daniva Road. Valevelu (big house). From Peter Rodda.

243 Suva marl. C.3194. 86·5m below the purple marker. 80 cm above Bed 291. Wailoku Road, Section 224 From Peter Rodda

WEEK 38 . 262-104 MONDAY 18

244 Kana Keoki. 82-03-16-03. Stn. 21 Rock Dredge 16. 3475 m. 16°30·41 S, 174°16·26 E. A full dredge of basalt, breccia & brown clay boulders (of 3 different sedimentary types.).

245 Kana Keoki. 82-03-16-03. Stn. 21 RD. 16. 3475 m - Same dredge, Sample, different piece of rock.

246 Beach sand from Vila, Vanuatu, near Hotel Rossi.

WEEK 38 . 263-103 TUESDAY 19

247 Kana Keoki. 82-03-16-03. Stn. 28 Rock dredge RD. 21. Scrapings of light coloured (creamish-brown) part of a boulder of sediment, most of which was kept by Murray Gregory.

248 Kana Keoki 82-03-16-03 Stn. 26 PCOD. 8. Top of core, i.e. near sediment surface. Mid-brown clay.

20 WEDNESDAY — WEEK 38 . 264-102

249 Kana Keoki 82-03-16-03. STN. 31 PCOD 9. 16°30·18'S, 169°31·90'E. 11 MAY 82 3050m. Sample from base of piston core, 4·5 m. below surface. Dark grey clay, prob. tuffaceous

250 Kana Keoki. 82-03-16-03. TC.9. 16°30·18'S, 169°31·90'E. 11 MAY 1982. 3050m Pentecost Basin. Sample from core catcher of Trigger Corer. TC is 16cm in length. Dark grey clay.

251 Kana Keoki. 82-03-16-03., Stn. 23, BC-1. 29 APR 1982., 1053-1352 GMT, 3220 m. Sample Scraped out of upper tube of camera sled,

21 THURSDAY — St. Matthew's Day — WEEK 38 . 265-101

252 Kana Keoki. 82-03-16-03. Stn. 28. RD. 21 (RD. 21 yielded 3 rocks, 1 basalt, 1 brown hard clay & this one: brown & cream hard clay).

253 Kana Keoki, 82-03-16-03. Stn. 28, RD. 21. See NS. 252. This sample is the hard brown clay referred-to, above.

254 Kana Keoki, 82-03-16-03. Stn. 23, RD. 17 15° 03·39'S, 171° 57·91'E. 3160m. 29 APR 82 Two rocks collected: 1 basalt, 1 firm light brown clay bored by animals. Sample is a piece of this latter material.

WEEK 38 266-100

FRIDAY 22

255 Kana Keoki, 82-03-16-03. Stn. 22. PCOD 6, 0506 GMT, 28 APR 82, 3165 m. 16°30.44'S, 172°32.31'E. 11 m of core, this is a core-catcher sample. Fist washed on board, Quaternary.

256 Kana Keoki, 82-03-16-03. Stn. 21 RD. 16. Start of dredge haul - 16°33.17'S, 174°15.39'E. Light brown clay.

257 S.P. Lee L5-82-SP. DREDGE 8 "Tonga Platform" 21°52'S, 175°05'W Light brown clay. Dredged up the east-facing slope, 750 m - 600 m.

23 SATURDAY WEEK 38 . 267-99

WEEK 39 . 268-98 SUNDAY 24

17th After Trinity

258 S.P. Lee. L5-82-SP. DREDGE 8 "Tonga Platform" 21°52'S, 175°05'W Yellowish-brown compact speckled rock.

259 Burraneer Bay, Recent. Sample from the head of Burraneer Bay, collected by Estuarine Geology students, 1982.

260 Kackeraboite Creek, Mornington Peninsula, Vic. (As identified by R. A. Keble.)

SEPT.	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

25 MONDAY WEEK 39 . 269-97

261 The middle one of three quarries on the hillside running south from Lowndes Bridge, Moorabool River. Ref. 261107, Geelong, 1:63,360. Upper of two samples. 13:9:55

262 Same locality as NS.261. "Lower one of two samples, this one almost from base of exposure." ANC. 13:9:1955.

263 Lake Bullenmerri (County Hampden) Victoria South end. Road cutting opposite east end of picnic enclosure.

26 TUESDAY WEEK 39 . 270-96

264 Lake Bullenmerri, North end.

265 Kana Keoki PCOD.6

A 00 - 02 cm	B. 25 cm (Not rec'd)
C 49 - 51 cm	D. 74 - 76 cm
E. 99 - 101 cm	F. 124 - 126 cm.

266 Kana Keoki PCOD 6

A. 149 - 151	B 174 - 176
C 199 - 201	D 225 (Not rec'd)
E. 249 - 251	F. —

267 Kana Keoki 82-03-16-03 PCOD 6
A. 274 - 276 B. 299 - 301
C. 324 - 326 D. 349 - 351
E. 374 - 376 F. 399 - 401

268 Kana Keoki PCOD 6
A. 424 - 426 B. 449 - 451
C. 474 - 476 D. 499 - 501
E. 527 F. 550

269 Kana Keoki PCOD 6
A. 575 B. 595
C. 620 D. 666
E. 675 F. 704

270 Kana Keoki PCOD 6
A. 725 B -
C. 775 D 800
E. 825 F 850

271 Kana Keoki PCOD. 6
A. 875 B. 902
C. 925 D. 950
E. - F. -

272 Kana Keoki. 82-03-16-03 FFC.9
0 - 4cm.

273 Kana Keoki PCOD 5
A. 0 - 2 cm B. 25 - 27
C. 50 - 52 D. 75 - 77
E. 100 - 102 F. 125 - 127

274 Kana Keoki PCOD. 5
A. 148 - 150 cm B. 174 - 176
C. 200 - 202 D. 224 - 226
E. 250 - 252 F. 274 - 276

29 FRIDAY Michaelmas' Day

275

Kana Keoki PCOD-5
A. 299-301cm B. 324-326
C. 350-352 D. 374-375
E. 399-401 F. 424-426

276

Kana Keoki PCOD-5
A. 449-451cm B. 474-476
C. 499-501 C. 525-527
E 549-551 D. 562-564

277

Kana Keoki PCOD-5
A. 574-576 cm B. 599-601
C. 622-624 D. 649-651
E. 661-663 F. 674-676

278

Kana Keoki PCOD-5
A. 699-701 B. 724-726
C. 749-751 D. 774-776
30 SA E. 800-802 F. 824-826 . 275-91 SUNDAY 1
18th After Trinity

279

Kana Keoki PCOD.5
A. 849-851cm B. 858-860
C. 869-871 D. 899-901
E. 924-926 F. 949-951

280

Kana Keoki PCOD.5
A. 974-976cm B. 999-1001
C. 1024-1026 D. 1049-1051
E. 1062-1064 F. 1074-1076

281

Kana Keoki PCOD.5
A. 1099-1101cm B. 1124-1126
C. 1149-1151

282

Kana Keoki, FFC 6.
A. 00-02cm B. 24-26
C. 49-51 D. 74-76
E. 99-101

283 Kana Keoki, FFC. 8
A. 1-3 cm B. 24-26
C. 49-51 D. 74-76
E. 99-101

284 Kana Keoki FFC. 9
0-2 cm. see NS. 272
A. 24-26 B. 49-51
C. 74-74 D. 96-98

285 Kana Keoki PCOD-7
A. 1cm B. 25
C. 50 D. 75
E. - F. 125

286 Kana Keoki PCOD-7
A. 150 cm B. 175
C. 200 D. 225
E. 250 F. 275

287 Kana Keoki PCOD-7
A. 300 cm B. 325
C. 350 D. 375
E. 401 F. 425

288 Kana Keoki PCOD-7
A. 445 cm B. 475
C. 498 D. 525
E. 548 F. 576

289 Kana Keoki PCOD-7
A. 598 cm B. 625
C. 652 D. 675
E. 702

290 Kana Keoki PCOD. 7
A. 725 cm B. 753

291 Kana Keoki PCOD 8
A. 0cm. B. 25
C. 50 D. 75
E. 100 F. 118

292 Kana Keoki PCOD 8
A. 125cm B. 150
C. 175 D. 200
E. 225 F. 250

293 Kana Keoki PCOD 8
A. 275 cm B. 300
C. 325 D. 350
E. 375 F. 410

294 Kana Keoki PCOD 8

A. 425 cm B. 450
C. 475 D. 500
E. 525 F. 550

295 Kana Keoki PCOD 8
A. 575 cm B. 600
C. 600 D. 625
E. 675 F. 700

296 Kana Keoki PCOD 8
A. 725 cm B. 750
C. 775 D. 798

297 Kana Keoki PCOD 9
A. 5 cm B. 25
C. 56 D. 75
E. 94 F. 127

298 Kana Keoki PCOD 9
A. 149 cm B. 169
C. 186 C. 220
E. 248

299 Kana Keoki PCOD 9
A. 285 cm B. 308
C. 342 D. 421

300 Princetown Phosphate Deposit Locality.
Buff marl about 2 ft. above nodule bed.
Ex Box No. 2.

301 Princetown Phosphate Deposit Locality
Grey marl, 8-10 ft. above nodule bed.

302 Geelong. Cliffs on Corio Bay, between Cavendish St. & Ginn St. Upper sample.

303 Geelong 1:63,360, 330075. Sutherland's Ck. Maude Road, ditch on S. side of road, ¼ mile west of Hope's Bridge. Tertiary clay abutting against granite.
A.N.C. 21:3:1956.

304 Geelong District. Uppermost bed of clay overlying Limestone at New Quarry, Batesford. Immediately below gravels. 26:5:55.

305 Torquay, Vic. Soft Bed at Yellow Bluff.
A.N.C. 21:5:56

306 Torquay district. West side of Bell's Headland, 3"–1'3" above base. Bed D. → Field Book. p. 47. ANC. 20:5:56
Bed D is grey clay about 10' thick with two prominent beds of abundant fossils near base.

E. Marly lst.
D. 10' shelly clay
C 2' Hard Lst.
B 3" Yellow band
A 2' Black Turritella Clay.
Beach sand

307 Torquay, Bird Rock area. Lowest part of sequence exposed in anticline between Bird Rock and Fishermen's steps. ANC. 21:5:56

308 Torquay, Bird Rock area. Lowest bed (Glycymeris-bearing clay) in the Bird Rock section. A.N.C. 22·4·52. Sample 1.

309 As for 308. Second-lowest bed in the Bird Rock section. Sample 2, ANC. 22·4·52

310 As for 308. Third-lowest bed in the Bird Rock section. Sample 3, ANC. 22·4·52 Box done

311 As for 308. "Sample 4. Foot of Bird Rock ANC. 22:4:52" Consequently, samples 1-3 must be from west of Bird Rock, where lower beds than the base of Bird Rock are exposed.

312 Reserved for Sample 5 in Bird Rock Section.

313 As for 308. The only information with the sample reads: "Bird Rock, Sample 6, April 1952" It is probably from about 5 ft. above shore platform at Bird Rock.

314 A.1. Kana Keoki, 82-03-16-03. STN. 21. ROCK DREDGE 16. See Murray Gregory's Letter of 3·Nov·82. Murray Gregory sent 4 samples from aboulder of dark brown dense mudstone that had been bored and burrowed. It is overlain by a light-coloured ashy calcareous sediment which also infilled the burrows. NS. 314 is one of 2 samples labelled "A" by M.G. & is further designated A.1 by me, because it is fawn & lighter in colour than A.2 Box done

315 A.2 Kana Keoki, 82-03-16-03, STN. 21, RD. 16. See entry for NS.314. This sample is A.2. This colour difference was apparently due to hydration, because when examined subsequently, A.1 & A.2 were of identical colour. When dry, this sediment floats in water. Box done

316 B.1 Kana Keoki, 82-03-16-03. STN. 21; RD. 16. See Entry for NS.314. This is dark grey dense mudstone, bored & infilled by fawn sediment. The washed piece was cleaned as much as possible, and fragments kept. It sank in water & was only slightly affected by boiling Na_2CO_3 soln. Box done

317 B.2. Kana Keoki, 82-03-16-03. STN. 21, RD. 16. See Entry for NS.314. Dark grey dense mudstone. This piece showed less boring & infilling than NS.316 but it also refused to break up in Na_2CO_3 soln. Box done

318 Longford, Vic. Parish of Glencoe. Small marl-pit about 250 yds. west of Brock's Quarry. Lens on north face, rich in Cycloclypeus. An old pre-1959 sample, given an NS. number on 27:11:1982. Old box

319 Longford, Vic. Quarry in Allot. 36, Parish of Glencoe. Thin bed of greenish-grey clay, intercalated between Longford Lst. & Glencoe Lsts. lithologies. Numbered 27:11:1982. This quarry was filled in before 1970. Old Box

320 Torquay, Vic. West side of Bell's Headland. Bed B.101 of Raggatt & Crespin. Old box

321 Torquay, Vic. Cellepora Limestone. This is a pre-1959 sample, but washed in Oct. 1982. Box done

13 FRIDAY — WEEK 41 . 287-79

322 | Torquay, Vic. West side of Point Addis. Soft bed immediately above diastem. ANC. 20:5:56 | Box done Washed Sept. 1982

323 | Spring Ck., Minhamite. "Older microfossils" A pre-1959 sample, numbered 27:11:82. | Old Box

324 | Hamilton District. Clifton Bank, Muddy Ck. South side of outcrop. A.N.C., 4:8:1956. | Box done Washed Oct. 1982

325 | Hamilton District. Outcrop on Grange Burn, about 300 yds. north of "Clifton" gate. Sample from the lower of two harder shelly bands possibly marking brief diastems. A.N.C. 4:8:1956. | Washed Oct. 1982

326 | A sample whose label has been lost, but it is almost identical with NS. 325. | Box done

14 SATURDAY WEEK 41 . 288-78 — WEEK 42 . 289-77 SUNDAY 15

20th After Trinity

327 | Lake Gnotuk, near Camperdown, Vic. Label reads: "④ 5 ft. above ---" (illegible). | Box done

328 | Lake Keilambete. (Well-preserved forams & includes G. miotumida Group.) | Box done

329 | Aire District. Fishing Point. S-E side, near top of cliff. Jan. 1953. | Box done

330 | Aire District, Castle Cove. CC.50. About 25' up the cliff & stratigraphically 0-3' below ironstone. (Also marked: Washed 19:1:55) | Box done

331 | Aire District. Brown clay, very rich in Turritella, about 20 ft. below Greensand, First Gully west of Brown's Creek. |

WEEK 42 . 290-76

MONDAY 16

332 Shelly material attached to a loose block of Rivernook Member lithology, 300 yds west of Point Margaret & ¼ mile east of Rivernook House. Princetown District.

Boxes done all this page

333 Cowie's Creek Railway cutting, Ref. 392026 Geelong, 1:63,360. ("Orbulina Beds, Fyansford Clay")

334 Cliffs beside Wheat wharf, North Shore, Geelong. (From Box No. 2)

335 Batesford, "New Quarry", S-E side; Dark grey clay about 10ft. above top of Batesford Lst. ANC. 29:9:58

336 Balcombe Bay, N. end of Fossil Beach. Measured Section A, Sample FB.A.1. Orange Field Book, p. 62. ANC & JJC. 14:1:1956.

WEEK 42 . 291-75

TUESDAY 17

337 Beaumaris. About 15 yds. North of the north end of stone wall that runs south from the old Baths. 6" below nodule bed. ANC. 9:7:55.

338 Portland District. Clays from Point Y. Coll. N. Boutakoff. ?Werrikooian. This sample appears to be virtually unfossiliferous & contains mainly very fine sand. With it was a "sample Z" (N.B., ?Werrikooian) whose residue was entirely fine white sand. Both Conc & Residue from "Point Y" are in the NS. 338 Box. "Z" is in the Residue Coll.

339 Portland, Battery Point. ?Werrikooian. Yellow & buff clay. Orange Field Book. p. 51. Sample 3.

340 Donovan's Landing, S.A. (Glenelg R.) Lower Tertiary.

341 Cliffs on Glenelg River, below Princess Margaret Rose Cave. Lower Tertiary.

OCT.	S	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

18 WEDNESDAY — St. Luke's Day — WEEK 42 . 292-74

342 New Zealand, South Is., All Day Bay
Isis dactyla Bed, 1m above unconformity at top of Limestone with G. angiporoides. (Equiv. to basal Janjukian, probably.) Box done

343 N.Z., South Is. Blue Cliffs Sect., Otaio R. Sample q. 5:2:83. 2ft below top of Waitakian Box done

344 Batesford, New Quarry of Aust. Cement. Cycloclypeus bed on inclined footway. "-10 Washings." An old sample, the coarse fraction & possibly fine fractions of which have become separated. It was in a clean cloth bag with blue tape tie.

19 THURSDAY — WEEK 42 . 293-73

345 Old pre-1960 sample labelled: "Lower 2ft. of B.107 Bell's Headland - Upper of 2 samples" also: "From basal 2ft. of Jan Juc Formation, W. side of Bell's Headland". (B.107 is a sample no. of Raggatt & Crespin, 1955) Box done

346 An old sample that did not previously have a number: Castle Cove, CC. 29. "Lower Glen Aire Clays." Box done

347 West side of Bell's Headland, "2ft. black Turritella clay" (cf. Sample 306, Bed A.) Coll. Alison & Greg Knight, 14·3·83. Box done

348 "North" end of Addiscot Beach, 200m West of the Bells Headland outcrop. Sample B of Alison & Greg Knight, 14:3:83. A copy of Greg's sketch of the locality is located on the page opposite samples NS. 267-274 Box done

RELATES TO
NS. 347-348

The original is filed in the 1983 Miscellaneous file

Samples labelled "My bag & Hammer" in photo NS. 351

OC

WEEK 42 . 294-72

20

349 An old pre-1960 sample whose label reads: "Clay ? fossiliferous. East side of Black Rocks, near Point Addis" Whatever gave it the appearance of being fossiliferous was a false hope. Residue is sand with some fresh & some limonitized glauconite grains. The hand specimen retained is full of sponge spicules (or acicular crystals.). Box done

350 New Zealand. Mangapoike R. Sample from down in the river bed from a horizon where Hornibrook said a good Kapitean fauna would occur. G. Sphericomiozea Zone Box done

351 New Zealand, Mangapoike R., Sample from road cutting (see photo.) Box done

21 SATURDAY WEEK 42 . 295-71

WEEK 43 . 296-70 SUNDAY 22

21st After Trinity

352 New Zealand, Mangapoike R. Sample coll. with J. P. Kennett & N. D. Watkins in 1972. Labelled "3 ft. below ZF 92" (JPK number.) Contains a lot of quartz silt, a few pebbles up to 1 cm., some shell fragments & abysmally few forams, mainly benthic. Box done

353 Peterborough, Victoria. Cliffs 200 yards west of the Mouth of Curdie River. A.N.C. 5:10:55. This sample may not be entirely free from contamination, because it contains some Recent chiton valves. Box done

354 Orphanage Hill, Fyansford. "Macrofossils" NS. 354 Box done

355 Sample from small cliff on private track, "Craigton" Ref. 354043 Geelong 1:63,360 Coll. A.N.C. 26·7·1955. "Craigton" homestead is near the eastern end of the Moorabool Viaduct. Box done

OCT. | S 1 | M 2 | Tu 3 | W 4 | Th 5 | F 6 | Sa 7 | Su 8 | M 9 | Tu 10 | W 11 | Th 12 | F 13 | Sa 14 | Su 15 | M 16 | Tu 17 | W 18 | Th 19 | F 20 | Sa 21 | Su 22 | M 23 | Tu 24 | W 25 | Th 26 | F 27 | Sa 28 | Su 29 | M 30 | Tu 31

23 MONDAY WEEK 43 . 297-69

356 Mercer, North Is., New Zealand. Cliff beside railway. Otaian. Box done

357 Batesford, Vic. Cement quarry; sample from old railway cutting in floor of quarry. Coll. Alison & Greg Knight, April 1983. Box done

358 A pre-1960 sample given an NS. No. in 1983 "4ft. soft bed overlying Bird Rock cap" at Torquay

359 West side of Bell's Headland, Torquay. "3" yellow clay below hard band & grey clay below it, sampled to 1 ft. below hard band". See section accompanying NS. 306. On this section it represents Bed B and the top of Bed A.

24 TUESDAY United Nations' Day WEEK 43 . 298-68

360 NZ washed sample No. 1. Mangapoike Valley Nearest outcrop on road to Tukemokihi by Gate. Base of section on p. 21 of Tour Notes. "Level 0". Upper Tongaporutuan Washed by Adrian Trask

361 NZ Washed sample No. 2. Mangapoike Valley Road cutting. Sample from 2m above layer of concretions at top of Kapitean. See photo & note book.

362 NZ washed sample No. 3. Mangapoike Valley. Roadside sample, high in Opoitian. "Upper Gilbert".

363 NZ. washed sample No. 4. Lowest clay bed in Tongaporutuan above road level and about 10 m below the band of concretions in the Kapitean. Big road cutting/landslip in Mangapoike Valley. See wide angle photo.

364. NZ washed sample No. 5. Sample from immediately underneath the big concretions at the Kapitean unconformity. Big road cutting / landslip on road, Mangapoike Valley.

365. NZ washed sample No. 6. Sample from a thin finegrained bed down beside the river & 100 yds downstream from foot of cow track. Low in Opitian. Almost totally devoid of forams.

366 Kana Keoki

367 Kana Keoki

368 Sample 1 of 1.8.83. Deviation Rd, Tyansford "Orphanage Hill" about 3m below phosphatic nodule bed and the highest outcrop accessible from the road on 1.8.83.

369. Sample 2 of 1.8.83. Soft bed in cliff, about 60 cm. above beach level, about half-way between Point Danger & Jan Juc Point. The residue contains a lot of nice forams. incl. Planorbulinella

370 Sample 3 of 1:8:83. Glauconitic clay associated with a band of septarian nodules, about 20 feet above the conspicuous 2' limestone bed ("H" of R&C) and therefore = bed "L" of Raggatt & Crespin, 1955. Puebla Formation.

371 Sample 4 of 1:8:83 Grey clay immediately below a fairly well cemented bed which appears to be the lowest of these cemented beds containing Cellepora. This hard bed is identified as Bed M of Raggatt & Crespin. The sample came from about 20 feet east of a set of wooden* steps giving access to the beach (something like 100 yds NE of Bird Rock. (* i.e. wood-faced) BOX DONE

372 Sample 5 of 1:8:83. Grey clay immediately above Bed M as identified in Sample 371 and only about 60 cm above sample 371. BOX DONE

373 Sample 6 of 1:8:83. Fawn clay about 20 feet below the base of the rubbly limestone part of the Cellepora Limestone. Most of this 20 ft. interval (i.e. from the sample up to the base of the rubbly limestone) is clay. BOX DONE

374 Sample 7 of 1:8:83. Torquay. Point Danger. 25 cm bed of light grey clay immediately below a conspicuous limestone shelf.

Gage spells it KAIERERO, Park spells it ~~KA~~KAIARERO
The military map doesn't show it at all.

375 Bull Creek

376 Oamaru "Blue clay", 150m N. of Kaiarero Ck on coast. (Old Rifle Butts locality) Ref 540629 Oamaru 1:63,360 Appears to be Gee Greensand in Gage 1959 & of Otaian age.

377 ~~Oamaru "Green clay"~~ (Abandoned in NZ) USB.2 at 001313 Hartland, 40cm below Nyerimalang Fm XRD DONE

378 Landon Creek, south branch, Kokoamu Greensand immed below thin hard limestone. see photo, Ref.

379 "Otekaike Special School" 10m downstream from bridge at Ref.

380 Tongaporutuan at Mangaopari Stream

381 Kapitean greensand at Mangaopari Stream

382 Opoitian at Mangaopari Stream.

383 Mangaopari Stream } Check before Registering.

384

385 Bird Rock section, Torquay. 13·2·84 BOX DONE
1m below bed E

386 10 cm above bed E (= Bird Rock Cap.) 386 was BOX DONE carefully washed by decantation to preserve fines, to act as a control on other samples, which were washed thro' 180 mesh sieve.

387 1m above bed E BOX DONE

388 1m above bed F BOX DONE

389 10 cm below bed G. BOX DONE

390 1 m above bed G. BOX DONE

391 2·5 m below bed H BOX DONE

392 1 m below bed H, minor honeycomb BOX DONE

393 50 cm above bed H BOX DONE

394 1 m above bed H BOX DONE

395 20 cm below bed K BOX DONE

396 1 m above bed K BOX DONE

397 2 m above bed L BOX DONE

398 Lovett Bay, sample 1 of 26·8·84 ANC & RHH about 10 m, near Andromeda's mooring. BOX DONE

399 Lovett Bay, west end about 6 m Sample 2 of ANC & RHH 26·8·84 BOX DONE

400 Lovett Bay, Mid-bay opposite "Langley" about 15 m ANC & RHH 26-8-84. Sample 4 BOX DONE

401 Loscton Packard Bend, Top of shell bed, 0·1 m above water level. BOX DONE

402 Loscton Packard Bend, 0·45 m above top of shell bed (in bed "1·0 m fawn argillaceous fine sand, sparsely shelly.") BOX DONE

403 Loscton Packard Bend, 1·2 m above top of shell bed (in bed "0·2 m coarse sand). Field label reads "1·0-1·2 m above shell bed BOX DONE

404 Loscton, Packard Bend, 1·9 m above top of shell bed (at base of bed "0·7 m fine sand with shells") Concs. contain Ostracods & Miliolids Field label says "60 cm below Limestone" BOX DONE

405 Loxton, Packard Bend, 2·62 m above top of shell bed, (in bed "4cm carbonaceous clay") The conc contains a few benthic foram. and some Ostracods. DONE BOX

406 Loxton, Packard Bend. 1·2 - 1·8 m above top of shell bed. ("60 cm fawn & grey compact mottled clayey sand") BOX DONE

407 Loxton, Packard Bend. 2·4 m above top of shell bed ("0.7 m brown fine sand with shells") BOX DONE

408 Birregurra. Cliff on Barwon R. OPS & ANC 1953 Part of it was washed on 14·7·53. BOX DONE

Ref 057155 Rokewood 1:63,360.

409 Amphitheatre Leigh River, Sample 1 of ANC 19·12·84. Using K.N. Bells section, about 0·5m above base of exposed section and close below prominent overhanging limestone shelf. "Yellow clay" band in soft friable bryozoan sand"

410 Amphitheatre, Leigh River. Ref 057155 Rokewood 1:63,360 Sample 2 of ANC, 19·12·84. Using K.N. Bell's section, about 3 m above base of section. "Yellow clay" and friable bryozoan sand. BOX DONE

411 Amphitheatre, Leigh River. Ref as above Sample 3, 19·12·84. About 5m above base of section. "Yellow clay & sandy limestone".

412 Amphitheatre, as above. 19·12·84. Sample 4. About 7 m above base of section. "Yellow limestone"

413 Amphitheatre, as above. Sample 5. About 20 m above base of section. "Grey clay" BOX DONE

414 Amphitheatre, as above. Sample 6.
About 30m above base. Grey and
yellow clay.